

NOVEMBER 16.

The President, Dr. RUSCHENBERGER, in the chair.

Forty-two persons present.

The death of Alexander Wilcocks, M. D., a member, was announced.

The following was unanimously adopted :

*Resolved*—That the thanks of the Academy of Natural Sciences of Philadelphia be presented to Mrs. Isaac Hays for Waugh's excellent portrait of the late President, Isaac Hays, M. D., whose labors and influence during more than sixty years contributed largely to promote the interests of the society.

*Diœcism in Andromeda Catesbæi*, Walter.—Mr. THOS. MEEHAN remarked that in 1867 he had reported to the Academy the diœcism of *Epigæa*, and he believed this had stood so far the only case of unisexuality reported in the whole of the large order Ericacææ. He said he had now to add another in *Andromeda Catesbæi* of Walter, of which he exhibited specimens gathered last year on the Catawba River, in North Carolina. In the course of many days' journeyings he had the opportunity of examining numerous plants in many different districts, and they were all either wholly sterile or wholly fertile in separate plants, as in the specimens exhibited. Occasionally, as often seen in diœcious plants, a few capsules would be found on the sterile plants, but he could not say whether the seeds in them were perfect.

Mr. Redfield inquired whether Mr. Meehan had examined the flowers, and found intermediate stages of development in the sexual organs?

Mr. Meehan replied, that the plants were out of flower when observed; that it was the abundant fertility in some plants, and absolute sterility in others that had attracted his attention. From the remains of the few faded flowers he could find on the plants the stamens appeared perfect on the staminate plant, with no trace of pistil or ovary, while in the fertile plants no trace of stamens could be found about the remains, though it is probable from analogy in *Epigæa*, these organs in the fresh flowers would be found to exist in a rudimentary state.

*On Fresh-water Sponges*.—Mr. POTTS, continuing the subject of American forms of fresh-water sponges treated of some weeks ago, said that the number of species noticed during the few months in which they had claimed his attention gave some reason to believe that the Order *Spongida* has many more representatives in our fresh waters than has been generally supposed.

On a former occasion he had described three species of *Spongilla* from a small stream near Philadelphia, one of which, then named *S. tentasperma*, but which he now preferred to call *S. tenosperma*, exhibited features so exceptional as almost to claim for it generic distinction.

He had since found the *S. fragilis* of Leidy plentifully in the Schuylkill river below the dam, (Leidy's original locality), and above the dam a lacustrine form differing from that before alluded to. A very slender green species creeping along stems of sphagnum, etc., had been received from a swamp near Absecom, N. J. As it appeared to be entirely without spined spiculæ of either class, he proposed for it the name *S. aspinosa*.

From the Adirondack lakes a beautiful species, believed to be identical with *S. stagnalis*, Dawson, had been received through the kindness of Prof. H. Allen. Another lacustrine form which yet is not quite *S. lacustris*, was brought from the lake near Catskill Mountain House by Professors Cope and Hunt. Its status has not been fully determined.

From the cellar of an old ruin at Lehigh Gap, Pennsylvania, he had obtained four species, all of which appeared to be new. These were all thin, creeping or encrusting sponges, three of them of the birotulate type, briefly described as follows:

*S. argyrosperma*—seed body or spherulæ large, silver-white, densely covered with radial spiculæ, the shafts of which are long, stout, with numerous long spines, straight or curved; the rotulæ at each end being replaced by 1-4 strong recurved hooks.

*S. repens*—found creeping over the stems and leaves of *Potamogeton*; spherulæ also closely covered with spiculæ, shorter and more slender than those of the preceding species; their shafts nearly smooth, the rays of the rotulæ, six, eight or more, uniformly incurved like the ribs of an umbrella.

*S. astrosperma*—the spherulæ have the appearance of being much smaller than in either of the former species, which is probably due to the fact that the birotulate spiculæ surrounding the real capsules are very short; the length of the shaft being less than the diameter of the rays. They are rather sparsely scattered over the surface of the nearly transparent sphere, suggesting the name star-seeded.

The remaining form is considered a variety of *S. fragilis*, and called *minuta*; spherulæ much smaller than in the type species, the dermal and superincumbent spiculæ terminated by sharp points, while in the other they are universally truncate or rounded.

A more particular description with measurements, etc., is intended.

Mr. Ezra T. Cresson was elected a member of Council, to fill the vacancy caused by the resignation of Mr. Geo. Vanx.